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506 WEST BURNSIDE ROAD
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FOREST INSECT AND DISEASE SURVEY

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COOLEY SPRUCE GALL APHID ON DOUGLAS-FIR,
VANCOUVER ISLAND AND LOWER MAINLAND

R. Lew Fiddick and H. Peter Koot

The white, waxy, wool tufts currently visible on the underside of needles of young Douglas-fir trees on Vancouver Island and lower Mainland contain many dull, reddish eggs or egg shells of Cooley spruce gall aphid. Where the eggs have hatched, the young aphids or nymphs may be seen as numerous tiny dark specks on the underside of the needles.

Feeding by the nymphs will cause the needles to appear mottled with pale yellow spots. Severe attack, characterized by an abundance of woolly tufts, causes distorted needles, and may cause needle drop. It is not likely to cause much reduction in growth, unless the trees are small and very heavily attacked.

The nymphs develop into wingless and winged adults. The wingless remain on Douglas-fir and the winged migrate to spruce where their attack results in cone-like galls at the ends of branches.

Treatment of aphid infestations on Douglas-fir is seldom necessary. If control is desired due to persistent annual attacks and unwanted foliage discoloration, a thorough soaking of the foliage with an insecticide registered for use against aphids should be made after egg hatch wherever a population is visible on the needles.